

IN THE CLAIMS

Claims 1-49 are pending in this application.

1. (Previously Presented) A network system comprising:
 - a session control server controlling a communication session created between at least two terminal devices;
 - a presence server managing status information on one of said at least two terminal devices; and
 - a communication line connecting said session control server, said presence server, and said at least two terminal devices,wherein said session control server comprises
 - means for monitoring the communication session created between said at least two terminal devices by analyzing a packet communicated between said at least two terminal devices;
 - means for detecting based on a result of monitoring the communication session, a change in status information on a user of said one of said at least two terminal devices or on said one of said at least two terminal devices; and
 - means for notifying said presence server of an update request for the status information when the change in the status information is detected.
2. (Previously Presented) A network system comprising:
 - a first server receiving a packet sent from a terminal device or a server for relaying the packet to another server or another terminal device;
 - a second server managing status information on a user of said terminal device or on said terminal device; and
 - a communication line connecting said first server, said second server, and said terminal device, whereinsaid first server comprises
 - means for detecting a change in the status information on said terminal device or on a user of said terminal device by analyzing the packet; and
 - means for notifying said second server of an update request for the status information when the change in the status information is detected.

3. (Original) The network system according to claim 1, wherein said presence server comprises
 - means for receiving the update request for the status information; and
 - means for storing the status information; and means for updating said means for storing based on the update request.
4. (Original) The network system according to claim 3, wherein
 - said presence server further comprises means for comparing the notified status information with some other status information on the terminal device or a user of the terminal device, to which the status information belongs, for checking consistency of the update request with the other status information.
5. (Original) The network system according to claim 4, wherein
 - said presence server rewrites the other status information so that, when the other status information is not consistent with the status information specified by the update request, the other status information becomes consistent with the status information specified by the update request.
6. (Original) The network system according to claim 1, wherein SIP (Session Initiation Protocol) is used.
7. (Previously Presented) A network system comprising
 - one or more servers each having a function to monitor a communication session created between terminal devices; and
 - a presence server in which status information describing the status of said terminal device or the status of a user of the terminal device is stored, wherein
 - each of said one or more servers has a protocol stack for use by SIP,
 - one of the one or more servers other than said presence server monitors the communication session to detect a change in the status information, and
 - when the change is detected, the change in the status information is notified to said presence server.
8. (Previously Presented) A server connected via a network to a presence server

managing status information on a user of a terminal device or on the terminal device, said server comprising:

an interface for connection to a communication line;

a communication control unit that analyzes the reception, and reforms header parameters, of a received packet and transfers the received packet, whose header parameters have been reformed, to said interface;

a status management unit that manages the status of a communication session created between the terminal devices on a certain expiration time basis;

a terminal location management unit that manages address information on the terminal device notified via said communication line;

means for monitoring the communication session along with the received packet;

means for detecting a change in information on the status of the communication session or in the address information; and

a presence information update unit that generates a presence information update message, which informs said presence server that the status information or the address information has changed, when the change is detected and issues an instruction to send the message to said communication control unit.

9. (Original) The server according to claim 8 wherein

said means for detecting a change in information on the status of the communication session or in the address information receives a session control message or, from the terminal device, a location registration request message to detect the change.

10. (Original) The server according to claim 9 wherein

said presence information update unit comprises means for checking if a terminal device belonging to the status information is a terminal device managed by said server and, only when the status information in which the change was detected belongs to a terminal managed by said server, generates the presence information update message.

11. (Original) The server according to claim 10 wherein

said means for checking if a terminal device belonging to the status information is a terminal device managed by said server compares the domain name of the address of the server with the domain name of the address of the terminal device and, when the domain names match, determines that the terminal is to be managed by the server.

12. (Original) The server according to claim 8 wherein

said communication control unit has a protocol stack for use by SIP (Session Initiation Protocol) and

said presence information update unit assumes a moment, at which a 200 response message is received in response to an INVITE request message, as a time to change to a talking status and issues an instruction to send the presence information update message.

13. (Original) The server according to claim 8 wherein

said communication control unit has a protocol stack for use by SIP (Session Initiation Protocol) and

said presence information update unit assumes a moment, at which an ACK message is received after a 200 response message is received in response to an INVITE request message, as a time to change to a talking status and issues an instruction to send the presence information update message.

14. (Original) The server according to claim 8 wherein

said communication control unit has a protocol stack for use by SIP (Session Initiation Protocol) and

said presence information update unit assumes a moment, at which a BYE request is received, as a time to change to a terminating status and issues an instruction to send the presence information update message.

15. (Original) The server according to claim 8 wherein

said communication control unit has a protocol stack for use by SIP (Session Initiation Protocol) and

said presence information update unit assumes a moment, at which a 200

response message is received in response to a BYE request, as a time to change to a terminating status and issues an instruction to send the presence information update message.

16. (Original) The server according to claim 8 wherein
said communication control unit has a protocol stack for use by SIP (Session Initiation Protocol) and
said presence information update unit assumes a moment, at which a registration is made by a REGISTER message, as a time to change to an on-line status and issues an instruction to send the presence information update message.
17. (Original) The server according to claim 8 wherein
said communication control unit has a protocol stack for use by SIP (Session Initiation Protocol) and
said presence information update unit assumes a moment, at which a registration is deleted by a REGISTER message, as a time to change to an off-line status and issues an instruction to send the presence information update message.
18. (Original) The server according to claim 8, further comprising:
means for reading information on an expiration date of the session specified by a control message issued in the communication session; and
means for comparing the message that has been read with the current time of day,
wherein said presence information update unit assumes a time, at which the current time of day has passed the expiration time, as a time to change the status of the communication session and issues an instruction to send the presence information update message.
19. (Original) The server according to claim 18 wherein
said terminal location management unit has a timer to count the time of day, and
said presence information update unit assumes a time, at which the expiration time has expired, as a time to change the status to an off-line status and issues an

instruction to send the presence information update message.

20. (Original) The server according to claim 8, further comprising:
 - means for generating a PUBLISH message or REGISTER message including in a body thereof the status information or the address information,
 - wherein the PUBLISH message or REGISTER message is sent to said presence server as the presence information update message.
21. (Original) The server according to claim 20 wherein the body of the PUBLISH message or REGISTER message includes one of the following information: session type, information on the terminal device that has established the session, and information on a coding system and a communication speed used by the established session.
22. (Original) The server according to claim 8 wherein
 - said communication control unit has a function to send a new request message.
23. (Previously Presented) A presence server, connected via a network to a session control server managing a communication session created between at least two terminal devices, for managing status information on said communication session, said presence server comprising:
 - an interface receiving a status information update message received from said session control server if the session control server detects a change in the communication session;
 - storage means for storing a plurality of status information pieces;
 - means for receiving the status information update request message sent from said session control server;
 - means for changing a content stored in said storage means; and
 - means for judging whether there is an inconsistency between the status information included in the update message (first status information) and other status information (second status information) stored in said storage means and belonging to a terminal to which the first status information belongs,
 - wherein, if there is an inconsistency between the first status information and

the second status information, the second status information is made to match the first status information.

24. (Previously Presented) A communication control method for use in communication using one or more servers, each having a function to monitor a communication session created between terminal devices, and a presence server in which status information describing the status of the terminal devices or the status of a terminal user is stored, said method comprising the steps of:
 - starting a communication session using SIP (Session Initiation Protocol);
 - monitoring the communication session to detect a change in the status information; and
 - notifying, by one of the one or more servers other than said presence server, the change in the status information to said presence server when the change is detected.
25. (Original) The communication control method according to claim 24, wherein a session control server with a function to manage the communication session is used as one of said one or more server.
26. (Original) The communication control method according to claim 24, wherein said notification is made by sending a PUBLISH message or REGISTER message, whose body includes the status information or address information on said terminal device, to the presence server.
27. (Original) The communication control method according to claim 26, wherein the body of the PUBLISH message or REGISTER message includes one of the following information:
 - session type, information on the terminal device that has established the session, and information on a coding system and a communication speed used by the established session.
28. (Original) A server control method for use by a server that has an interface and a control function, said interface provided for connection, via a communication line, to

a presence server in which status information describing the status of a terminal device or a terminal device user is stored, said control function controlling a communication session created between at least two terminal devices, said server control method comprising the steps of:

- monitoring the communication session to detect a change in the status information;

- generating an update request message about the status information when the change is detected; and

- sending the update request message to said interface.

29. (Previously Presented) A computer readable recording medium for recording a control program for use by a server that has an interface and a control function, said interface provided for connection, via a communication line, to a presence server in which status information describing the status of a terminal device or a terminal device user is stored, said control function controlling a communication session via SIP (Session Initiation Protocol) created between at least two terminal devices, said control program executing the steps of:

- monitoring the communication session to detect a change in the status information;

- generating an update request message about the status information when the change is detected; and

- sending the generated update request message to said interface.

30. (Previously Presented) The computer readable recording medium according to claim 29 wherein the step of generating an update request message about the status information includes the step of:

- generating a PUBLISH message or REGISTER message whose body includes the status information and address on the terminal device.

31. (Previously Presented) The computer readable recording medium according to claim 30, comprising the step of generating the PUBLISH message or REGISTER message whose body includes the following information: session type, information on the

terminal device that has established the session, and information on a coding system and a communication speed used by the established session.

32. (Previously Presented) The network system according to claim 1, wherein
said means for notifying said presence server generates information of the update request for the status information when the change in the status information is detected.
33. (Previously Presented) The network system according to claim 1, wherein
said means for notifying said presence server generates information of the update request for the status information when the change in the status information is detected, by reflecting the change in the status information.
34. (Previously Presented) The network system according to claim 1, wherein
said means for notifying said presence server generates information of the update request for the status information by reflecting session status of a plurality of clients.
35. (Previously Presented) The network system according to claim 2, wherein
said means for notifying said second server generates information of the update request for the status information when the change in the status information is detected.
36. (Previously Presented) The network system according to claim 2, wherein
said means for notifying said second server generates information of the update request for the status information when the change in the status information is detected, by reflecting the change in the status information.
37. (Previously Presented) The network system according to claim 2, wherein
said means for notifying said second server generates information of the update request for the status information by reflecting session status of a plurality of clients.

38. (Previously Presented) The network system according to claim 7, wherein information of the update request for the status information is generated when the change in the status information is detected.
39. (Previously Presented) The network system according to claim 7, wherein information of the update request for the status information is generated when the change in the status information is detected, by reflecting the change in the status information.
40. (Previously Presented) The network system according to claim 7, wherein information of the update request for the status information is generated by reflecting session status of a plurality of clients.
41. (Previously Presented) The server according to claim 8, wherein said presence information update unit generates information of the update request for the status information when the change in the status information is detected.
42. (Previously Presented) The server according to claim 8, wherein said presence information update unit generates information of the update request for the status information when the change in the status information is detected, by reflecting the change in the status information.
43. (Previously Presented) The network system according to claim 8, wherein said presence information update unit generates information of the update request for the status information by reflecting session status of a plurality of clients.
44. (Previously Presented) The communication control method according to claim 24, wherein the step of notifying, by one of the one or more servers other than said presence server, the change in the status information to said presence server when the change is detected further comprises the step of generating information of the update request for the status information when the change in the status information is detected.

45. (Previously Presented) The communication control method according to claim 24, wherein the step of notifying, by one of the one or more servers other than said presence server, the change in the status information to said presence server when the change is detected further comprises the step of generating information of the update request for the status information when the change in the status information is detected, by reflecting the change in the status information.
46. (Previously Presented) The communication control method according to claim 24, wherein the step of notifying, by one of the one or more servers other than said presence server, the change in the status information to said presence server when the change is detected further comprises the step of generating information of the update request for the status information by reflecting session status of a plurality of clients.
47. (Previously Presented) The server control method according to claim 28, further comprising the step of generating information of the update request for the status information when the change in the status information is detected.
48. (Previously Presented) The server control method according to claim 28, further comprising the step of generating information of the update request for the status information when the change in the status information is detected, by reflecting the change in the status information.
49. (Previously Presented) The server control method according to claim 28, further comprising the step of generating information of the update request for the status information by reflecting session status of a plurality of clients.